

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of claims:

1-10 Cancelled

11. (Currently Amended) Control system for remote manipulation equipment (41) fixed on carrying equipment (43) operating in a confinement containment (40) and subjected to radioactive radiation comprising:

- "onboard" control means located inside the containment (40) designed to control movements of the manipulation and carrying equipment (41, 43); and
- management means (42) located outside the containment (40) providing the interface between the operator and the control means,

characterized in that:

- the control means comprise firstly a control box (20) ~~impermeable to radiation and~~ comprising electronic circuit boards, and secondly a power supply box (1) ~~impermeable to radiation and~~ comprising at least one energy supply source, [[and]]

- a lead base plate (31) configured to shield the electronic circuit boards of the control box (20) from radiation, and

- management means (42) comprise a communication device to transmit orders to onboard control means and to receive data about the state of the control means and the state of remote manipulation and carrying equipment (41, 43).

12. (Canceled)

13. (Currently amended) Control system according to claim 11, characterized in that the electronic circuit boards comprise several microprocessors ~~operating~~ configured to operate alternately and processing circuits ~~providing~~ configured to provide functional control over the microprocessors.

14. (Previously presented) Control system according to claim 11, characterized in that the control system is self-configurable to match the manipulation equipment (41) and the carrying equipment (43).

15. (Previously presented) System according to claim 11, characterized in that the control means (42) comprise circuits for processing status data received from the control means to diagnose failures and operating errors of the equipment (41, 43) and the control means.

16. (Previously presented) System according to claim 11, characterized in that the control means are each provided with a base (19, 30), larger than the power supply box (1) and the control box (20), fixed permanently on each equipment to be controlled and each being provided with:

- means of attachment to a control box (20) or a power supply box (1) onto the base

- internal connection means to make electrical and/or electronic connections between the box and the base on which the box is fixed; and

-external connection means for making external electrical and/or electronic connections between the equipment (41, 43) to be controlled and the base (30).

17. (Previously presented) System according to claim 16, characterized in that the power supply boxes (1) and the control boxes (20) are provided with locking means (10, 12, 21, 23) on their corresponding bases (19, 30, 44), that can be manoeuvred from outside these power supply boxes (1) and control boxes (20).

18. (Canceled)

19. (Previously presented) System according to claim 16, characterized in that the power supply boxes (1) and the control boxes (20) each comprise a stainless steel housing closed by a Plexiglas cover (6, 27).

20. (Previously presented) System according to claim 19, characterized in that the control system comprises gaskets (8, 26) to be used for assembly of the Plexiglas covers (6, 27).

21. (Canceled)

22. (Previously presented) System according to claim 11, wherein the control

box (20) and the power supply box (1) are each configured to be removably attached to the carrying equipment (43), wherein the carrying equipment (43) is configured to support the control box (20) and the power supply box (1) when the control box (20) and power supply box (1) are attached to the carrying equipment (43).

23. (Currently amended) Control system for remote manipulation equipment (41) fixed on carrying equipment (43) operating in a confinement containment (40) and subjected to radioactive radiation comprising:

- "onboard" control means located inside the containment (40) designed to control movements of the manipulation and carrying equipment (41, 43); and
 - management means (42) located outside the containment (40) providing the interface between the operator and the control means,
- characterized in that:

- the control means comprise firstly a control box (20) ~~impermeable to radiation and~~ comprising electronic circuit boards with several microprocessors operating configured to operate alternately, and secondly a power supply box (1) ~~impermeable to radiation and~~ comprising at least one energy supply source comprising two power supply sources operating that are each configured to provide power to the microprocessors, wherein the two power supply sources are configured to operate redundantly such that each power supply source is capable of replacing the other power supply source to provide power to the microprocessors if the other power supply source becomes defective, wherein the control means is configured to shield portions

of the control box and supply box from radiation, and

- management means (42) comprise a communication device to transmit orders to onboard control means and to receive data about the state of the control means and the state of remote manipulation and carrying equipment (41, 43).

24. (Previously presented) System according to claim 23, wherein the at least one energy supply source contains all of the power supply sources used for transmission of information to the management means.

25. (Previously presented) System according to claim 23, wherein the control box (20) and the power supply box (1) are each configured to be removably attached to the carrying equipment (43), wherein the carrying equipment (43) is configured to support the control box (20) and the power supply box (1) when the control box (20) and power supply box (1) are attached to the carrying equipment (43).

26. (New) System according to claim 11, wherein the control box (20) includes a housing (20A) and is configured to be attached to the carrying equipment (43), wherein the lead base plate (31) is configured to be placed between the housing (20A) and the carrying equipment (43) when the control box (20) is attached to the carrying equipment (43).

27. (New) System according to claim 26, wherein the control box (20) further

includes a base (30) configured to be permanently attached to the carrying equipment (43) and the housing (20A) is configured to be removably attached to the base (30), wherein the base (30) includes the lead base plate (31).

28. (New) Control system for remote manipulation equipment (41) fixed on carrying equipment (43) operating in a confinement containment (40) and subjected to radioactive radiation comprising:

- "onboard" control means located inside the containment (40) designed to control movements of the manipulation and carrying equipment (41, 43) ; and
- management means (42) located outside the containment (40) providing the interface between the operator and the control means,

characterized in that:

- the control means comprise firstly a control box (20) comprising electronic circuit boards configured to determine movements to be made by the manipulation equipment (41), and secondly a power supply box (1) comprising at least one energy supply source comprising two power supply sources that are each configured to provide power to the electronic circuit boards to determine movements to be made by the manipulation equipment (41), wherein the two power supply sources are configured to operate redundantly such that each power supply source is capable of replacing the other power supply source to provide power to the electronic circuit boards to determine movements to be made by the manipulation equipment (41) if the other power supply source becomes defective, wherein the control means is

configured to shield portions of the control box and supply box from radiation,
and

- management means (42) comprise a communication device to transmit orders to onboard control means and to receive data about the state of the control means and the state of remote manipulation and carrying equipment (41, 43).

29. (New) System according to claim 28, wherein the at least one energy supply source contains all of the power supply sources used for transmission of information to the management means.

30. (New) Control system for remote manipulation equipment (41) fixed on carrying equipment (43) operating in a confinement containment (40) and subjected to radioactive radiation comprising:

- "onboard" control means located inside the containment (40) designed to control movements of the manipulation and carrying equipment (41, 43) ; and
- management means (42) located outside the containment (40) providing the interface between the operator and the control means,

characterized in that:

- the control means comprise firstly a control box (20) comprising electronic circuit boards, and secondly a power supply box (1) comprising at least one energy supply source, wherein the control means is configured such that the control box and supply box are substantially shielded from gamma rays from

a radioactive source, and

- management means (42) comprise a communication device to transmit orders to onboard control means and to receive data about the state of the control means and the state of remote manipulation and carrying equipment (41, 43).